DETAILED ACTION

Status of Application

1. Acknowledgement is made of applicant's amendment/remarks on 03/29/2010. By the amendment, claim 18 has been amended.

2. Applicant's amendment necessitates a new ground of rejection in this Office Action.

3. Applicant's arguments have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of actions being applied to the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18, 20-22 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernton et al. (US 5605885).

The specification defines that the term "treatment" (any variations such as "treat, treating, etc.") include not only "ameliorating the symptoms…" but also "preventing or delaying the presentation of symptoms…". The American Heritage Dictionary (Second College Edition, 1982) defines the term "prevent" as "anticipate or counter in advance, to keep from happening".

The analysis of the instant claims 18-22 and 24-26 allows for the inclusion of any patient population, as long as the same compound is administered to body of the patient in overlapping dosage amounts. In other words, the instant invention is construed to mean the absolute absence of stress-related symptoms or stressful event.

Bernton teaches the administration of prolactin agonist (e.g., cysteamine or cysteamine hydrochloride), singly or in combination with other agent (e.g., cyclosporine), to an animal or human thereby preventing or treating the deleterious effects of stress (e.g., psychosocial stress such as bereavement), or to stimulate immune, or bone marrow function, namely antagonizing suppression of immune function by chronic stress or prevention or treatment of stress induced impairment of the immune system, wherein said cysteamine is administered orally once or twice each day to achieve adequate immunostimulation in approximately 1 to 25 mg per kg body weight (column 2, line 64 through column 3, line 27 and 64-67; column 5, lines 5-8 and lines 60-62; column 8, lines 61-65; column 4, lines 17-23; column 10, line 52 through column 11, line 53; Example 1).

Although Bernton is silent about the functional property of cysteamine in lowering endogenous cortisol level or "preventing or delaying" (see definition of the term "treatment" in page 11, lines 3-19 of the specification) at least one stress-related symptom, such property deems to be inherent to the referenced method. It is noted that the prior art method directing the administration of same compound (i.e., prolactin like compound such as cysteamine or cysteamine hydrochloride) to same patient population, in overlapping dosage amounts, inherently possessing same therapeutic utility for the ultimate purpose as disclosed by the applicant anticipates the instant invention even explicit recitation of underlying mechanism.

To the extent that the claims 18, 20-22 and 24-26 include the active step of administering cysteamine to the patient prior to the stressful event, the instant invention is construed to mean the absolute absence of stressful event. In other words, the analysis of the instant claims 18-22 and 24-26 allows for the inclusion of any patient population, as long as the same compound is administered to body of the patient in overlapping dosage amounts. The examiner determines that the prior art patient taking opioid or glucocorticoid, cancer patients, critically ill-patients and etc... falls within "metes and bounds" of the instant patient population without the stressful event, and thus Bernton anticipates the instant invention.

Applicant's attention is directed to Ex parte Novitski 126 USPQ 1389 (BOPA 1993) illustrating anticipation resulting from inherent use, absent a haec verba recitation for such prophylactic utility. In the instant case, as in Ex parte Novitski, the claims are directed to preventing a malady or disease with old and well known compounds of compositions. The prior art administering compounds inherently possessing a protective utility anticipates claims directed to such protective use.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernton et al. (US 5605885) in view of McCleary (US 6964969).

The teaching of Bernton has been discussed in above 35 USC 102(b) rejection.

McCleary is being provided as a supplemental reference to demonstrate the routine knowledge in using therapy such as relaxation, massage, acupuncture, psychotherapy, meditation, taking a sedative and the like for the treatment of stress (column 21, lines 3-14).

The teaching of Bernton differs from the claimed invention in the use of cysteamine and therapy (e.g., counseling, psychotherapy, exercise, meditation and massage therapy).

Above references in combination make clear that cysteamine and therapy such as relaxation, massage, acupuncture, psychotherapy and meditation have been individually used for the treatment of stress. It is obvious to combine two compositions each of which is taught by prior art to be useful for same purpose; idea of combining them flows logically from their having been individually taught in the prior art. The combination of active ingredient with the same character is merely the additive effect of each individual component. *See In re Kerkhoven, 205 USPQ 1069 (CCPA 1980).*

Double Patenting Rejection

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 18, 20-22 and 24-26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over:

(i)) claims 1, 24, 42 and 43-45 of copending Application No. 11/118737;

(ii)) claims 1-5, 7-13 and 15-16 of copending Application No. 11/605551;

(iii) claims 1-15 and 22-23 of copending Application No. 12/259721;

(ii) claims 1-13 of copending Application No. 12/265447;

(iii) claims 10-15 of copending Application No. 12/097837;

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims and those of the patented recite the administration of the same compounds to same patient population for the prophylactic or preventive utility. Because the instant invention can be construed to mean the absolute absence of stress-related symptoms or stressful-event, the cited references directing the administration of the same compound(s) inherently possessing therapeutic effect, in overlapping dosage amounts, to same patient

population as disclosed by Applicant anticipates the Applicant's invention even absence of the claimed feature.

Since the transitional term "comprising" is inclusive or open-ended and does not exclude additional, unrecited elements or method steps, the referenced combinatorial use disclosed in the copending applicatin'721, '447 and '837 makes obvious the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 18, 20-22 and 24-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-5 of US Patent No. USP 7442720.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims and those of the patented recite the administration of the same compounds to same patient population for the prophylactic or preventive utility. Because the instant invention can be construed to mean the absolute absence of stress-related symptoms or stressful-event, the cited references directing the administration of the same compound(s) inherently possessing therapeutic effect, in overlapping dosage amounts, to same patient population as disclosed by Applicant anticipates the Applicant's invention even absence of the claimed feature.

Since the transitional term "comprising" is inclusive or open-ended and does not exclude additional, unrecited elements or method steps, the referenced combinatorial use makes obvious the instant invention.

Response to Arguments

8. Applicant's arguments filed 03/29/2010 have been fully considered but they are not persuasive.

Applicant's argument in the response takes the position that Bernton fails to disclose every elements of the claimed invention because the amended claims require that cysteamine is administered to treat stress-related symptoms that result from a stressful event selected from the following list: "uncontrollable shaking; hyperventilation...". Applicant asserts that nowhere does Bernton describe the administration of cysteamine, prior to a stressful event, to treat stress-related symptoms, let alone those symptoms listed in the claims as amended.

The specification defines that the term "treatment" (any variations such as "treat, treating, etc.") include not only "ameliorating the symptoms…" but also "preventing or delaying the presentation of symptoms…". The American Heritage Dictionary (Second College Edition, 1982) defines the term "prevent" as "anticipate or counter in advance, to keep from happening". The analysis of the instant claims 18-22 and 24-26 allows for the inclusion of any patient population, as long as the same compound is administered to body of the patient in overlapping dosage amounts. In other words, the instant invention is construed to mean the absolute absence of stress-related symptoms. Thus, the prior art directing administration of the same compound(s) inherently possessing therapeutic effect, in overlapping dosage amounts, as disclosed by Applicant anticipates the Applicant's invention even absence of the claimed feature. Applicant's attention is directed to Ex parte Novitski 126 USPQ 1389 (BOPA 1993) illustrating anticipation resulting from inherent use, absent a haec verba recitation for such prophylactic utility. In the instant case, as in Ex parte Novitski, the claims are directed to preventing a malady or disease

with old and well known compounds of compositions. The prior art administering compounds inherently possessing a protective utility anticipates claims directed to such protective use.

In response to the applicant's argument (which is similar to the previous argument filed 06/16/09 and 09/29/09) that Bernton fails to teach the administration of cysteamine, or a salt thereof, to a patient prior to a stressful event, the examiner recognizes that the referenced patients with "chronic severe stress", and "critically ill patients such as those with severe burns or complications of sepsis or of multiple trauma…" (column 2, line 65 through column 1, line 17; column 5, lines 60-63) are the suitable treatment population of the instant invention and discloses that the administration of the prolactin (e.g., cysteamine or a salt thereof) would provide a treatment for stress induced impairment of the immune system. Since the substantial portion of patients encompassed by Bernton, which is an immunosuppressed animal or human associated with stress or stressful event (which is a physical, mental, or emotional response that causes bodily or mental situation, for example severe burns or multiple trauma, psychosocial stress or bereavement, cancers, infections, etc…), distinguish from the subset of patient with the impairment of adrenal cortical secretory functions, the examiner determines that the functional property of cysteamine in maintaining or lowering endogenous cortisol level deems to be inherent to the immunosuppressed animal or human associated with stress or stressful events. One having ordinary skill in the art would have understood, reading the entire context of Bernton, that the impaired immune response associated with stress or stressful event which is due, in part, to an increased secretion of adrenal corticosteroids from the adrenal glands in response to stress or stressful event, would be benefited from the administration of the prolactin

(cysteamine or a salt thereof). Thus, the prior art method directing the administration of same compound (i.e., prolactin like compound such as cysteamine or cysteamine hydrochloride) to same patient population, in overlapping dosage amounts, inherently possessing same therapeutic utility for the ultimate purpose as disclosed by the applicant anticipates the instant invention even explicit recitation of underlying mechanism.

Anticipation under 35 USC 102 is an essentially irrebuttable question of fact, wherein the court stated that anticipation "cannot be overcome by evidence of unexpected results or teachings away in the art". *In re Malagari, 499 F.2d 1289, 182 USPQ; In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re Fracalossi, 681 F.2d 792, 215 USPQ 569 (CCPA 1982); In re Alternpohl, 500 F.2d 1151, 183 USPQ 38 (CCPA 1974); In re Wiggins, 488 F.2d 538, 179 USPQ 421 (CCPA 1973); In re Wilder, 429 F.2d 447, 166 USPQ 545 (CCPA 1970).* Indeed, a reference might reside in a nonanalogous art and yet constitute an anticipation of a claimed invention under 35 USC 102. *In re Self, 571 F.2d 134, 213 USPQ 1 (CCPA 1982).* .In this case, the prior art method directing the administration of same compound (i.e., prolactin like compound such as cysteamine or cysteamine hydrochloride) to same patient population (e.g., patient taking glucocorticosteoids or opioid), in overlapping dosage amounts, inherently possessing same therapeutic utility for the ultimate purpose as disclosed by the applicant anticipates the instant invention even explicit recitation of underlying mechanism.

Applicant's argument in response to the 35 USC 103 rejection is basically the same as discussed above, so the response discussed above applies here as well and is unpersuasive for reason just discussed

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Conclusion

9. The amendment necessitates a new ground of the rejection in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. No Claim is allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718. The fax number for this Group is (571) 273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications may be obtained from Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Brian-Yong S Kwon/
Primary Examiner, Art Unit 1614